Prep notes for meeting with the Blue Green Alliance on Chemical Security

At 11AM on Thursday 4/7, you are meeting with the Blue-Green Alliance, led by Greenpeace, to discuss Chemical Security. In attendance will be: Greenpeace, the Communication Workers, Steelworkers, and USPIRG. John Morowitz representing the Chemical and United Foodworkers and possibly a NJ group will call in. (b)(5) (DPP) [redacted]

There have been legislative efforts to improve on the current state of affairs. The House bill (H.R. 2868) from last Congress updated chemical facility rules and added rules for drinking water and wastewater facilities. It created four tiers of high risk facilities that perform vulnerability assessments. The facilities in the highest two tiers because of release risk could be required to adopt inherently safer technology (IST). (b)(5) (DPP) [redacted]

Background Primer: Chemical Security Issues(prep from OEM/OW)

Issue: Rick Hind of Greenpeace is suggesting that EPA use authority under the Clean Air Act Section 112(r) to establish requirements for ***inherently safer technologies*** by users of hazardous chemicals.

1. Existing federal government programs

Chemical Facility Anti-terrorism Standards (CFATS)

- Established by DHS in 2007 to address onsite security of chemicals
- Applies to most facilities using listed chemicals above threshold quantities
  - Water and wastewater, maritime, and nuclear facilities are exempted
- Requires a vulnerability assessment and site security plan

Risk Management Program (RMP)

- Established by EPA in 1999 under Clean Air Act section 112(r) to address accidental release of chemicals
- Applies to all facilities using listed chemicals above threshold quantities
- Requires a risk management plan, including a hazard assessment, prevention program, and emergency response program

(b)(5) (DPP) [redacted]

- [redacted]
- [redacted]

3. Legislative action on new chemical security requirements

- The House passed legislation in 2009 that would have extended chemical security requirements to the water sector and established IST requirements for all high risk systems (H.R. 2868)
- The Senate did not pass H.R. 2868 out of committee (a substitute bill was passed that extended the existing CFATS program)
  - (b)(5) (DPP) [redacted]
- [redacted]

Details on RMP (in case you are not familiar)

What is RMP?

- EPA established a "**List of Substances for Accidental Release Prevention**", overlapping with but different from the EHS list for EPCRA -- 77 acutely toxic chemicals and 63 flammables/explosives. Each has a Threshold Quantity (TQ). Any fixed facility (with some exceptions for facilities having propane for their own use or for retail sale, agricultural situations and others) with a substance above the TQ must develop an RMP, include a 5 year accident history, submit it to EPA, amend it if circumstances change, and update it every 5 (check this) years.
- Originally, over 18,000 facilities reported. Current list is down to about 17,000. (b)(5) (DPP) [redacted]
- The RMP has a fairly rigid formulation, easily computerizable, and much of its content is available to the public.
- Off-site consequence analyses (OCA): These are required of all RMP facilities -- one reasonable worst case scenario and one extreme worst case scenario. They follow guidelines for determining the farthest distance that the worst conceivable consequences could be imagined -- acutely toxic like Bhopal or the kind of conflagration that killed 600 and burned down Galveston in 1947. (b)(5) (DPP) [redacted]

(b)(5) (DPP) [redacted]

Inherently safer technologies

Right from the beginning, EPA has worked with trade associations, individual companies, academics, the Center for Chemical Process Safety (an arm of the American Institute of Chemical Engineers) and others on ways to reduce risks of chemical accidents, to limit their impacts, and to allow for prompt and effective emergency response. A part of this has addressed inherently safer technologies, either by substituting other substances in a product or process (e.g. Blue Plains quickly got rid of the tank cars of liquid chlorine used for disinfection, substituting sodium hypochlorite), or changing processes so very hazardous intermediate substances are not kept in large quantities (e.g. the same pesticide involved in Bhopal is now made without separately keeping large quantities of MIC on hand), or some better fail-safe technologies, or other means.